

FACT SHEET

Human Disease Surveillance in Fairfax County



“Human disease surveillance” is a term that describes how the Health Department detects outbreaks of communicable disease rapidly in the community by collecting and analyzing health data from a variety of sources, such as schools, hospitals, physicians, and laboratory tests.

Every day, the Fairfax County Health Department’s Communicable Disease Epidemiology program conducts human disease surveillance, with the goal to reduce illness and death in the community. The program identifies illness, investigates causes, and recommends actions to stop or prevent disease transmission. Local surveillance efforts are coordinated with regional, state and federal efforts.

Public School Absenteeism Surveillance

The Health Department School Illness Monitoring System (HDSIMS) is a Web-based surveillance method in Fairfax County that enables early detection of communicable gastro-intestinal and influenza-like-illness outbreaks in schools. The system, launched in 2004, is a collaboration between the Health Department and Fairfax County Public Schools (FCPS).

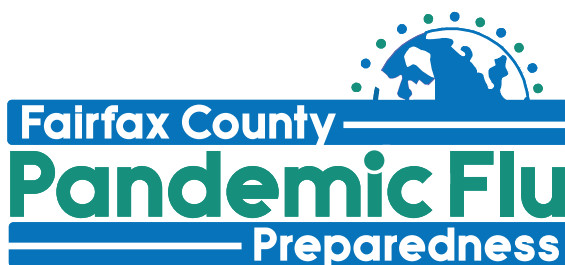
In each school, the number of student absences for the day is compared to the school’s five-day absenteeism average. If absences are statistically higher than that average, a warning is signaled. The Health Department’s school nurses and clinic room aides review reasons for absences, rule out non-illness absences, and in many cases call parents to gather information (such as symptoms and onset of the illness). When necessary, the Health Department and FCPS implement disease prevention and control measures, such as hand washing and cough hygiene education, parent notification, and facility cleaning.

Emergency Department Syndromic Surveillance

The Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) is a system that collects data from hospital emergency departments and other sources, and monitors trends. This system enables early recognition of disease events, including outbreaks and potential bioterrorism events.

The information collected – such as chief complaints from hospital emergency departments, over-the-counter drug sales, and clinical data from selected primary care settings – is provided to local health departments to enhance their human disease surveillance efforts. The information is categorized into syndrome categories (such as gastrointestinal, respiratory, etc.). The system also performs analysis and provides information on statistical anomalies to allow early identification of outbreaks or diseases of public health concern.

The Fairfax County Health Department, as well as other health departments in the National Capital Region and the Virginia Department of Health, participate in ESSENCE. In Fairfax County, local emergency departments participate daily by electronically providing the previous day’s chief complaints. The Health Department monitors the Virginia ESSENCE and Aggregated National Capital Region (ANCR) systems daily, including weekends and evenings, and follows-up on all trends of public health concern.



www.fairfaxcounty.gov/emergency/pandemicflu

Reportable Disease Surveillance

A number of diseases are required by state law to be reported to the local health department. The Virginia Reportable Disease List, maintained by the Virginia Department of Health, identifies all conditions (including outbreaks or suspected bioterrorism events) required to be reported in Virginia. The list is available at www.vdh.virginia.gov/epi/list.asp.

Physicians, laboratories, and medical facilities located in Fairfax County should report diseases directly to the Fairfax County Health Department. To report a reportable disease or outbreak, or for more information on disease reporting requirements, contact the Health Department at 703-246-2433, TTY 703-591-6435.

Sentinel Physician Influenza Surveillance

The Fairfax County Health Department monitors seasonal influenza-like illness in the community during each influenza season (Oct. through May) with the help of private medical practices that voluntarily participate in the program ("sentinel physicians"). These medical practices monitor the number of patients presenting to their offices with influenza-like illness and report the number to the Health Department.

This information is reported to the Virginia Department of Health, which then uses the data to assess and classify the regional and state levels of influenza activity. Fairfax County has participating sentinel physician practices geographically distributed within the county. Influenza surveillance is part of the routine Reportable Disease Surveillance described above.

Laboratory Surveillance

The Fairfax County Health Department Laboratory partners with Virginia's laboratory in Richmond to ensure appropriate lab surveillance, transportation and testing procedures are performed as needed. The state lab is also known as the Division of Consolidated Laboratory Services (DCLS).

DCLS tests and examines biological and chemical specimens for evidence of agents of terrorism, outbreaks and emerging infectious diseases. DCLS also performs DNA fingerprinting and other molecular assays which identify and characterize infectious disease agents in support of disease surveillance activities. Data regarding the DNA fingerprints of microorganisms are entered into a national database to determine possible links to outbreaks within the state, region or country. Specimens are submitted to DCLS directly from hospitals or from the Fairfax County Health Department.

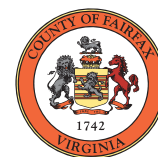
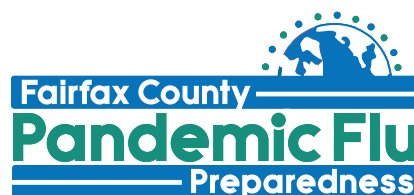
The Fairfax County Health Department Laboratory provides quality clinical and environmental testing including testing for enteric bacteria, tuberculosis, sexually transmitted diseases, HIV, hepatitis, and parasites.

Enhanced Surveillance

When necessary, the Fairfax County Health Department initiates enhanced surveillance methods (in addition to its routine surveillance efforts) to assess and control communicable diseases in the community. Enhanced surveillance measures are often prompted by state and federal notifications of urgent public health recommendations via a systematic alert network. The Health Department also monitors bulletins from state and federal partners.

Using a blast-fax system and other means of communication, the Health Department notifies local health care providers, community physicians and hospitals about urgent recommendations on disease testing, diagnosis, treatment, epidemiology and infection control, and if necessary, requests specific disease reporting.

For more information regarding Fairfax County Health Department's human disease surveillance, please contact the Communicable Disease Epidemiology program at 703-246-2433, TTY 703-591-6435.



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